# 2008 Engineering Conference Breakout Period 7.

**9. Digital Aerial Camera Applications for Roadway Mapping**
**Track**: Design
**Presenters**: Casey Francis, Seth Tait
**Synopsis**: Digital camera technology offers many benefits over traditional film-based systems. These include an end-to-end digital workflow resulting in quicker mapping schedules, multispectral imagery, improved image quality and reduced ground control requirements. The session will also describe the peripheral equipment used in tandem with the digital camera and the technology behind it.
**Time Required: 50 Minutes**

**14. Cold Inplace Recycle using Engineered Emulsion, placed at night.**
**Track**: Construction
**Presenters**: Lief Condie (Resident Engineer UDOT), Cameron Ryan (SEM Materials)
**Synopsis**: The I-15, MP 6-10 project incorporated 3" of cold inplace recycle prior to placement of HMA and SMA paving. Due to traffic impacts, delays and hot weather, project specifications required the completion of cold recycle during nighttime operations. Lessons learned regarding placement requirements and challenges, quality control, and traffic use of cold recycled pavement will be discussed.
**Time Required: 50 Minutes**

**20. 4(f) Training**
**Track**: Environmental
**Presenters**: Betsy Skinner
**Synopsis**: New regulations for Section 4(f) went into effect on April 11, 2008. This presentation discusses the major changes and provides guidance on how to complete a Section 4(f) evaluation.
**Time Required: 50 Minutes**

**24. The Erodibility Index Method for Estimating Pier Scour on the US-191; Over Colorado River Bridge project.**
**Track:** Hydraulics
**Primary Presenters:** Jeff Sims, P.E. - H.W. Lochner, Senior Drainage Engineer
Denis Stuhff, P.E. - UDOT Central Hydraulics
**Synopsis:** Learn about estimating pier scour in rock using the Erodibility Index Method. This approach evaluates the erodibility threshold of materials from cohesive to cohesionless and from silt to rock. By making a comparison of this with the stream power, you can develop a more applicable estimate of potential scour depth in rock than with the traditional HEC-18 methodology. This presentation will focus on the use of this method for the US-191; Over Colorado River Bridge project near Moab, Utah.
**Time required:** 50 Minutes

**28. GFRP reinforcing bars, opposite from the steel bars**
**Track:** Research, Structures, Construction, Material
**Primary Presenters:** Richard Miller, Colby Christensen, Hughes Brothers
**Backup Presenters (if any):** Daniel Hsiao
**Synopsis:** Glass Fiber Reinforced Polymer (GFRP) rebar could be a good alternative to the tradition concrete reinforcing steel. GFRP is free from chlorine corrosion. AASHTO has adopted the GFRP design specs this year (2008). It is a major step to allow widely use of GFRP on highway bridge decks.
At this session, you will learn: 1. "What is GFRP" from one of the suppliers? 2. What studies have been done in GFRP nationally? 3. What is UDOT's view and decision on GFRP?
**Time required:** 50 minutes

**36. Rural Road Safety Improvements and Corridor Safety Assessments (CSAs)**
**Track:** ITS / Traffic Management / Safety
**Presenters:** Kaz, Mack Christensen, Brian Christensen
**Synopsis:** FHWA has initiated a program to improve safety on rural roads that have high crash rates and do not receive other federal funds. UDOT and Horrocks Engineers are performing safety audits in rural counties to identify locations where warning signs and other enhancements would reduce the number and severity of crashes

Also, the Corridor Safety Assessments (CSAs) program examines existing state roadway corridors with histories of frequent ROR crashes to identify features that may be affecting crashes. As deficiencies in the roadway are found, Engineers identify a prioritized listing of improvement projects. UDOT then programs funding to match the needs of the improvement projects. This slightly different concept of a Federal Road Safety Audit will allow state DOTs to evaluate priority segments in a timely and cost effective manner.
**Time Required:** 50 minutes

**52. How to set up and host an Adobe Connect Meeting**
**Track:** Project Management
**Presenter:** Richard Murdock
**Synopsis:** Adobe Connect Pro Meeting was recently purchased by Project Development as the communication tool for Construction, Materials and Project Management training. This tool enables meetings, presentations and training to be conducted over the internet. It can be used for video conferencing, Online or distance meetings, brainstorming sessions (with use of whiteboards), and live training with recording options.
**Time Required: 50 Minutes**

**58. What is the Public's Role in Developing Transportation Solutions?**
**Track**: Public Involvement
**Presenters**: Eileen Barron (Parsons Brinckerhoff)
**Synopsis**: This session will provide practical guidelines and tips for determining the level of public influence on project decisions and how to dig to understand stakeholders' underlying issues. We will briefly cover public involvement regulations, but spend the majority of time focused on techniques to uncover core interests in order to work with stakeholders toward identifying viable solutions.
**Time Required: 50 Minutes**